## IN THE UNITED STATES PATENT AND TRADEMARK OFFIC

In re Patent Application of

RECEIVED

**NAKAMURA** 

APR 2 6 2004

Atty. Ref.: 1767-72

Serial No. 09/695,043

OFFICE OF PETITIONS

Group: 1741

Filed: October 25, 2000

Examiner: Mayekar, Koshor

For: DECOMPOSITION APPARATUS OF ORGANIC COMPOUND,

DECOMPOSITION METHOD THEREOF, EXCIMER UV LAMP AND EXCIMER

**EMISSION APPARATUS** 

MINULSTOP PETITIFIONS

April 22, 2004

**Assistant Commissioner for Patents** Washington, DC 20231

Sir:

## RENEWED PETITION TO REVIVE UNINTENTIONALLY ABANDONED APPLICATION

On June 3, 2003, the undersigned filed a Withdrawal of Erroneous Abandonment Notice or in the Alternative Petition to Revive (copy with all attachments attached hereto). Status Inquiries were subsequently filed on August 5 and September 23, 2003 and several telephone calls were made to the Group in an effort to secure a Decision on the June 3, 2003 Request/Petition. Then, on January 16, 2004, a copy of the June 3, 2003 Request was transmitted by facsimile to the attention of Special Programs Examiner Bill Kryski. Shortly after, on January 30, 2004, a Decision was rendered on the Petition for Withdrawal of Abandonment, denying that petition. However, the Decision advised that the application would be forwarded to the Office of Petitions for consideration of applicant's alternative Petition to Revive Unintentionally Abandoned Application.

On information on belief this application was been forwarded from Technology Center 1700 to the Office of Petitions and repeated telephone calls have not been effective to obtain transfer of the application to the Office of Petitions for a Decision on the Petition to Revive. Accordingly, the undersigned hereby <u>renews</u> the Petition to Revive Unintentionally Abandoned Application, first filed June 2, 2003, pursuant to the Decision of January 30, 2003, and requests that the Office of Petitions now consider the undersigned's alternatives ं. हर Petition to Revive Unintentionally Abandoned Application and reinstate this application

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NAKAMURA Serial No. 09/695,043 April 22, 2004

forthwith. In the event the required fees to revive this application have not previously been charged to the undersigned's account in connection with the original petition, authorization is hereby given to charge the required revival fees to our Deposit Account No. 14-1140 under Order No. 9901-14 for this case.

An early and favorable Decision on the Petition to Revive is respectfully requested.

Respectfully submitted,

**NIXON & VANDERHYE P.C.** 

By:

Michelle N. Lester Reg. No. 32,331

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1100 North Glebe Road, 8th Floor

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## OFFICE OF PETITIONS

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

NAKAMURA Atty. Ref.: 1767-72

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DECOMPOSITION METHOD THEREOF, EXCIMER UV LAMP AND EXCIMER

**EMISSION APPARATUS** 

\* \* \* \* \* \* \* \* \* \*

June 3, 2003

Assistant Commissioner for Patents Washington, DC 20231

Sir:

# WITHDRAWAL OF ERRONEOUS ABANDONMENT NOTICE OR IN THE ALTERNATIVE PETITION TO REVIVE

It is understood that the subject application has been abandoned because applicant allegedly failed to file a response to the Office Action mailed November 15, 2002. Withdrawal of the Abandonment of this application is respectfully requested.

This application was filed on October 25, 2000 as a division of parent Application No. 09/132,215, filed August 11, 1998. On November 15, 2002, a Restriction Requirement was issued in connection with this case. On December 10, 2002, a Response to the Examiner's Restriction Requirement was filed. It has been discovered that due to an internal clerical/computer error, the header to that Amendment and Response to Restriction Requirement inadvertently referenced the parent application rather than the serial number and filing date of the subject divisional application. Nevertheless, the header properly identified the Attorney Docket Number for this case (1767-72), the title, and specifically referenced the Office Action dated November 15, 2002. A copy of that Amendment and Response to Restriction Requirement and the undersigned's postcard receipt evidencing its receipt by the U.S. Patent Office on December 10, 2002 are attached.

Although the Response properly identified the Attorney Reference Number, title, and Office Action in response to which the Amendment and Response was being submitted, the December 10, 2002 Response was apparently never matched with the subject application. It

is unclear whether the paper was placed in the file of the parent application or mis-routed within the U.S. Patent Office.

Because an Amendment and Response to Restriction Requirement was timely filed on December 10, 2002, and properly identified this case by Attorney Docket Number and Title, and referenced the Official Action of November 15, 2002, it is respectfully submitted that applicant should be accorded a response date of December 10, 2002 and this application should not have been abandoned for failing to respond to the Office Action of November 15, 2002.

In the alternative, if the December 10, 2002 submission is considered fatally defective for showing the parent serial number instead of the serial number of the present divisional application, please consider this a Petition to Revive an Unintentionally Abandoned Application and please accept the herewith re-presented Amendment and Response to Restriction Requirement, which has been re-headed to specifically identify this divisional application by serial number, as the required response. Please charge any required fees for withdrawal of the abandonment and/or revival of this application to the undersigned's Deposit Account number 14-1140 under Order No. 1767-72 for which purposes this petition is submitted in duplicate.

If there are any questions regarding this request/petition, please contact the undersigned at the number indicated below.

Respectfully submitted,

**NIXON & VANDERHYE P.C.** 

By:

Michelle N. Lester Reg. No. 32,331

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APR 2 6 2004

## OFFICE OF PETITIONS

C#/M#: 1767-72

Serial No.: 09/695,043

Inventor/s: NAKAMURA

Atty: Michelle N. Lester

Date: Jun. 3, 03

Title: DECOMPOSITION APPARATUS OF ORGANIC COMPOUND, DECOMPOSITION METHOD THEREOF,

EXCIMER UV LAMP AND EXCIMER EMISSION APPARATUS

XX Amendment and Response to Restriction

Requirement

Address Indication Form

\$ Fee (Check) - Pre-Bill

\$ Fee (Check) - Non Pre-Bill

\$0.00

**Total Fee Enclosed** 

Other: Withdrawal of Erroneous Abandonment Notice or in

the Alternative Petition to Revive w/attachments

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Examiner: Mayekar, Koshor

For: DECOMPOSITION APPARATUS OF ORGANIC COMPOUND, DECOMPOSITION METHOD THEREOF, EXCIMER UV LAMP AND EXCIMER EMISSION APPARATUS

June 3, 2003

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

## **AMENDMENT AND RESPONSE TO RESTRICTION REQUIREMENT**

Responsive to the Official Action dated November 15, 2002, kindly enter the following amendment and remarks.

### **IN THE CLAIMS**

The following claim set replaces all prior versions, and listings, of claims in the application:

1. (original) A decomposition apparatus for decomposing an organic compound fluid such as a gas of an organic compound, a liquid thereof, a gas containing an organic compound, and a liquid containing an organic compound, which comprises:

an excimer lamp emitting UV light for decomposing said organic compound, and a decomposition container provided with an excimer lamp for decomposing said organic compound in said organic compound fluid.

- 2. (original) A decomposition apparatus as claimed in Claim 1, wherein two or more decomposition containers each having said excimer lamp are jointed for flowing said fluid in one container to the other container in order.
- 3. (original) A decomposition apparatus as claimed in Claim 1, wherein said container is equipped with a flow rate buffering material for slowing down a flow rate of said fluid.
- 4. (original) A decomposition apparatus as claimed in Claim 1, wherein said decomposition container is equipped with a contact part between said fluid and a catalyst gas for promoting decomposition of the organic compound.
- 5. (original) A decomposition apparatus as claimed in Claim 1, wherein an organic compound to be decomposed selected from fan, dioxin (polychlorinated dibenzo-para-dioxin), PCB (polychlorinated biphenyl), trichloroethylene, tetrachioroethylene, dichloromethane, tetrachloromethane, 1,2-dichloroethane, 1,1-dichloroethane, cis-1,2-dichloroethane, 1,1,1-trichloroethane, 1,3-dichloropropene and a mixture thereof.

6. (original) A decomposition apparatus as claimed in Claim 1, wherein said excimer lamp comprises:

a discharging vessel made of a dielectric material with excellent permeability of UV light,

an inner tube equipped on the inside of the discharging vessel, a protect tube equipped on the outside of the discharging vessel,

an outer electrode equipped in the position between the protect tube and the discharging vessel,

an inner electrode equipped on the inside of the inner tube,

a filling gas filled up in said discharging vessel, and

a power supply for applying a voltage between said outer electrode and said inner electrode.

7. (original) A decomposition apparatus as claimed in Claim 6, wherein said excimer lamp comprises:

said power supply applying a high frequency voltage from 1 to 20 MHz to a metal container and the inner electrode.

- 8. (original) A decomposition apparatus as claimed in Claim 1, wherein a wave length of UV light is of 222nm or below.
- 9. (original) A decomposition apparatus of an organic compound fluid such as a gas of an organic compound, a liquid thereof, a gas containing an organic compound and a liquid containing an organic compound, which comprises:

an excimer emission body equipped with an inner electrode,

a metal container equipped to the outside of said excimer emission body for filling up at least one selected from a liquid of an organic compound and a liquid containing organic compound a power supply for applying a high frequency voltage

between the inner electrode and the metal container, and

a UV light irradiated from said excimer emission body to said liquid in said metal container allows to generate OH radical and 0 radical in the liquid, and

the radical cutting some bond of the organic compound so that the organic compound in the liquid is decomposed easily.

10. (original) A decomposition apparatus as claimed in Claim 9, wherein said excimer emission body comprises:

a discharging vessel made of a dielectric material with excellent permeability of UV light,

an inner tube equipped on the inside of said discharging vessel, an inner electrode equipped on the inside of said inner tube, and a filling gas filled up in said discharging vessel.

11. (original) A decomposition apparatus as claimed in Claim 9, wherein said excimer lamp comprises:

said power supply applying a high frequency voltage from 1 to 20 MHz to the metal container and the inner electrode.

- 12. (original) A decomposition apparatus as claimed in Claim 9, wherein an organic compound is selected from flon, dioxin (polychlorinated dibenzo-para-dioxin), PCB (polychlorinated biphenyl), trichioroethylene, tetrachloroethylene, dichloromethane, tetrachloromethane, 1,2-dichloroethane, 1,1-dichloroethane, cis-1,2-dichloroethane, 1,1-trichloroethane, 1,3-dichloropropene and a mixture thereof.
- 13. (original) A decomposition apparatus as claimed in Claim 9, wherein a wave length of UV light is of 222nm or below.

14. (currently amended) A decomposition method for decomposing said an organic compound fluid, which is used in said a decomposition apparatus as claimed in Claim 1 that comprises an excimer lamp emitting UV light for decomposing said organic compound in said organic compound fluid, which method comprises the steps of:

flowing a <u>organic compound</u> fluid—which is selected from a gas of an organic compound, a liquid thereof, a gas containing an organic compound and a liquid containing an organic compound during the emission of UV light which is irradiated from—an <u>said</u> excimer lamp, and

decomposing the organic compound in said fluid during-its said flowing step.

- 15. (original) A decomposition method as claimed in Claim 14, wherein said fluid flow slowly at a flow rate buffering material during the emission of UV light.
- 16. (original) A decomposition method as claimed in Claim 14, wherein said fluid flows slowly at a flow rate buffering material during the emission of UV light.
- 17. (original) A decomposition method as claimed in Claim 14, wherein an organic compound is selected from flon, dioxin (polychlorinated dibenzo-para-dioxin), PCB (polychlorinated biphenyl), trichloroethylene, tetrachloroethylene, dichloromethane, tetrachloromethane, 1,2-dichloroethane, 1,1-dichloroethane, cis-1,2-dichloroethane, 1,1-trichloroethane, 1,3-dichloropropene and a mixture thereof.
- 18. (original) A decomposition method as claimed in Claim 14, wherein a wave length of UV light is of 222nm or below.

Claims 19-24 (canceled).

#### **REMARKS**

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested.

Claims 1-18 remain pending. Claim 14 has been amended above so as to be presented in independent form and so as to otherwise be in more proper U.S. claim format.

Responsive to the Examiner's Restriction Requirement, Applicant hereby provisionally elects Invention II, claims 14-16, drawn to a method for decomposing an organic compound fluid. This election is made with traverse. Applicant reserves the right to file a divisional application directed to the subject matter of the non-elected claims.

An early and favorable Action on the merits of claims 14-18 is solicited.

Respectfully submitted,

**NIXON & VANDERHYE P.C.** 

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Serial No.: 09/132,215

C#/M#: 1767-72

Inventor/s: NAKAMURA

Atty: Michelle N. Lester Date: Dec. 10, 02

Title: DECOMPOSITION APPARATUS OF ORGANIC COMPOUND, DECOMPOSITION METHOD

THEREOF, EXCIMER UV LAMP AND EXCIMER EMISSION APPARATUS

# XX Amendment

\$ Fee (Check) - Pre-Bill

Fee (Check) - Non Pre-Bill

\$0.00 Total Fee Enclosed

Other: ADDRESS INDICATION FORM

